HOSPITAL AND TRAINING SCHOOL ADMINISTRATION

IN CHARGE OF
ALICE SHEPARD GILMAN, R.N.

STRUGGLES OF THE PIONEERS[1]

BY ANNA C. MAXWELL, R.N.
Presbyterian Hospital, New York

The events of the late Nineteenth and early Twentieth Centuries have wrought many wonderful changes; probably none of greater moment to the human race than the advance made in Medicine, Surgery, Bacteriology and Nursing. In the past forty-seven years since the Bellevue Hospital of New York, the Massachusetts General of Boston, the State Hospital at New Haven, Connecticut, opened their doors to the establishment of the Nightingale system for the scientific training of the nurse, there have been many years of waiting adequate means for instruction, for better conditions of living, shorter hours, and recognition as a profession.

The pioneers of nursing had to have courage, patience, and perseverance of rare quality. They had to convince the medical profession, the hospital management, and the public, of the value of instructed nurses, of the interdependence between medicine and nursing, and to gain the moral and financial support of our best people. It was no simple task to parry their questionings; to give convincing proof of the importance of what was then looked upon as "menial service"; to gain coöperation from the unbelieving, and to storm the doors of legislation to secure state registration for nurses and the proper recognition of our Army Corps. I have been privileged to see many of these changes and to participate in some of the royal battles that have brought us by determination and faith in our ideals to the present status as a recognized profession. Possibly a few of the details of our beginnings may help to inspire our successors to less complaint of their hardships, taking them in a sporting spirit, learning to play the game, leading to a higher conception of the spirit of service.

Florence Nightingale has said that our aim should be "health" nursing, instead of "sick" nursing. Can a higher service be rendered mankind than is in our power to give?

[1] Read at a meeting of the New York State Nurses' Association, Albany, N. Y., October, 1920.

Part of my training was taken in a Woman's Hospital. The wards were arranged for four beds. Between each two wards there was a nurses' room, used by day for convenience of ward work and occupied by the nurses for sleeping at night. A supervisor made rounds on the wards at night, and when the patients required any attention more than she could give as she passed, the day nurse was called. If the nurse proved to be a light sleeper with keen interest in her patients, she knew much of what happened during the night and was often called upon to help out. If beds were full, each nurse gave semi-private care to eight patients, keeping the ward bathroom clean, doing the dusting, and so forth. Twelve-hour service was required, with one afternoon off duty each week. There was no elevator, and when new patients arrived or operative cases had to be carried, the nurses were pressed into service. Instead of a stretcher, as we know it, a six-foot wicker basket with three handles on each side was used, and we had to stiffen our spines in order to reach the third story with one hundred and eighty pounds weight aboard.

We learned much of good bedside nursing when a good superintendent was in charge, but they were ever changing and the doctors did not approve of our knowing the object of treatment or the contents of the medicine given. In explanation they said that nurses would imagine results if they knew what was expected.

In the maternity department, we had charge of six women and six babies; they had to be ready for "rounds" at eight-thirty in the morning, babies bathed, women's beds made, and binders fresh, pinned one inch apart. We went on duty at five in the morning, breakfasted at seven-thirty, and had an hour off, sometimes! All diapers were washed out by the nurses and there were douches galore. Digital examinations were forbidden. We were to judge when to summon the doctors by the cries of the patients. Lectures were good, but irregularly given, and there was no time for class work or quizzes.

At a later date, and under the guidance of Linda Richards, the first American graduate, a woman of rare intelligence with a vision of the future of nursing ever before her, I was to learn the elements of scientific training.

The probation term was one month; the course two years; two weeks of holiday each year. On entrance to the school, I was escorted to a small room off a women's ward, containing four beds, two bureaus, two chairs, pegs on the wall for costumes, and the use of a lavatory and bathroom shared with the ward. When we retired, we pushed the beds apart to get in, and sometimes entertained a stray night nurse who occupied the bed by day.

My first ward was a men's surgical, of thirty-two beds, staffed

by a head nurse, (a Bellevue graduate), one pupil nurse, one probationer, a day and night orderly. We swept the floors, dusted the wards, kept the bathroom and lavatory clean, listed the laundry, served the meals, washed the dishes, cleaned the ice box. A ward maid was added later. When the beds were full, we each cared as we might for sixteen patients. Many of them recovered, despite our ignorance and the crude attention our limited time made possible. The service was active and there were few fractures or wounds that did not come before our observation.

Schools were established rapidly after the first five years of trial. Hospital authorities had found out how cheaply and effectively they could get their work done. This naturally created a consequent shortage of graduates to take up the ward teaching of the pupils, as head nurses. To fill this gap, pupil nurses after a few months' training were put forward as heads of wards, and it fell to my lot to take charge of a large women's medical ward of thirty beds; staff, two assistant nurses of the old type, a pupil night nurse. These "ladies" changed their dresses at the noon recess and attempted to occupy rocking chairs most of the afternoon. The condition of the patients was unspeakable; bed sores, tangled hair, unclean heads, and bodies. As an example: I asked one woman to remove a bandana handkerchief which I noted she had worn continuously. After much expostulation, this was accomplished, when lo! the scalp, with only a few hairs, was black with pediculi. Fortunately, two pupil nurses, willing to work, took the places of the "ladies of leisure" and better conditions were established.

There was an infinite variety of things to learn, as the service was divided between three sets of attending physicians. When on "rounds," the third day, in answer to the attending physician's questions, I said (being truthful), "I don't know," he looked severely over his glasses and remarked, "Who should know if the head nurse doesn't?" I then realized that the head nurse must have a marvellous memory, unlimited intuition, and that she must be viligant and omnipresent! The field of instruction could not be covered at once and we simply had to take up many things as the devil did sinning. Crude carbolic crystals were sent for use in the wards, and one of my classmates had her face disfigured for life while melting them into solution, as she did not know that carbolic acid destroys tissue. Temperature charts were in use, but bedside notes were unknown; we were expected to have the mental equipment to carry all details in our heads. My first head nurse impressed upon me the fact that it was a sin to forget anything connected with the sick. We were taught to recognize "laudable pus" when dressing wounds, to catheterize by

touch under the bedclothes, without cleansing the parts,—with resulting cystitis, and many other obsolete methods. Enemata were given with a bulb syringe with a four-inch hard rubber nozzle; a starch enema, given in cases of dysentery, was administered with a hard rubber piston syringe with a ten-inch point which we tried to insert without causing a fissure of the rectum. The stomach content was evacuated, when poisons had been taken, by tickling the back of the throat with a feather or the finger.

The hospital beds were eighteen inches from the floor. In the typhoid season, sponges for reduction of temperature were ordered every two hours, when the temperature rose above 103 degrees. These sponge baths had to be given kneeling, to save strain on the nurses' backs; result,—housemaid's knee. When the number of typhoids in my ward reached seventeen, with temperatures soaring high, I remonstrated at the school office and was told I'd have to get on with the present staff (two pupils). I burst out with the remark: "You are killing one set of women to make well another!" I wasn't dismissed for my impertinence, although I expected to be, and one ceased to care what happened when overwhelmed with such heavy responsibilities. The next day, another pupil was sent as an extra for the typhoids and she proved to be a treasure, giving us a new lease on life. In those days the public had a horror of hospitals and the typhoids came too late for effective treatment. The Brandt bath was just being introduced into this country. The patient was transferred on his bed to the bathroom every three hours for this bath. As many of them were almost moribund on admission, we did not see a single recovery from this treatment. Prejudice against the method followed, and the use of the tub bath in the treatment of typhoid did not become popular till ten years later.

Transferred to the charge of a gynecological ward, mixed cases, with private rooms and an operating room attached, many things happened to remove any lingering traces of conceit I might have had.

Malingering was common in city hospitals. Mercury in the thermometer was often shaken up or raised by the heat of a hot water bag when our backs were turned. Blood sucked from the gums was swallowed and vomited up, and we found difficulty in believing any of the reported symptoms not visible to our eyes. A patient too weak to leave her bed got out of a third-story window in a fit of delirium, crawled along a gutter, and fell to her death. No windows were barred. Bars were only used for the detention of prisoners and the insane, and many lives were sacrificed before intelligent managers were willing to place such safeguards upon hospital windows. Imagine the responsibility of the nurses.

Later I was given charge of a large men's surgical ward, where I saw the first attempts at the introduction of the antiseptic or Lister method of dressing wounds. (When in London, in the summer of 1876, I had read the famous articles by Lord Lister upholding the germ theory, describing the new method of preventing introduction of germs into wounds,—in short, the method that revolutionized modern surgery!) In the operating room a carbolic spray, from an atomizer holding two quarts and weighing several hundred pounds, was put into our hands and orders were given that we were to keep our eyes on the field of the operation and see that it was constantly sprayed. The safety pin was carbolized and instruments were dipped in carbolic, but the finger nails and hands of the operator were never made clean. Gauze charged with carbolic and some form of wax, baked in a special oven, was used as dressing for the wounds. Under this method, in my nine months' experience in this surgical ward, I saw one wound heal by primary union; the wound was sutured and dressed by the same hand and no infection introduced. The Lister method emboldened surgeons to undertake abdominal surgery, but I saw before graduation in 1880, only one operation for ovarian cyst. When sudden emergencies arose in the hospital, we considered it an honor to be called upon for special duty in tracheotomy or other severe cases where a life was in danger, and night work was often undertaken after a strenuous day.

As for class work, lectures and examinations were held regularly, although all lectures were given in the evening. As a special privilege, two of my class were taught massage by Dr. Douglas Graham and we gave lessons at night to the other pupils during the remainder of our course.

The attending staff was generally appreciative, although some of them objected to waiting for screens and there was little thought for preserving the modesty of the sick. The house staff was quizzical. Why had we chosen such disagreeable work? Did we ever expect to be received by our social friends after taking such a radical step? We did not feel resentful of necessary criticism, but found many unnecessary things humiliating. A notice appeared on our bulletin board one day, stating that employees and nurses must enter and leave the building by the basement door. This was because the porter complained that he had to clean the dust too frequently from the upper corridors. But for the high regard in which we held the superintendent of our school, I think the whole body of students would have left.

On graduation, I hastened to accept an appointment to establish a training school in a distant city. There I found everything bending

to the will of the attending staff; hospital funds were taken to purchase champagne to be used in building up reserve forces of patients to be operated upon, while ragged ticks filled with straw were the only beds provided for patients, and a basket full of straw could be swept up after students' rounds. The laundry was inadequate. Damp linen was sent to the wards to be hung as decorations (?) upon any available space until dry enough to use. The hospital was crowded and there was no division of the services. Available beds were used for surgical or medical cases, as they were admitted, with the result that the lungs of a suffering T. B. patient were often filled with smoke from his neighbor's pipe, the neighbor being a strong, lusty man with a fractured femur.

An attempt had been made to remedy defective ventilation by bringing air into the wards through large pipes a foot in diameter. These pipes were fitted with dampers. The dampers had apparently been closed for years, for pails full of dust fell when I opened them.

Examination of urine was carried on in the wards. Specimens were placed on a table, and each student examined them at will, from one to three days later. Add to this the fact that all lavatory utensils were of opaque china, filled with sediment of long standing, and you can imagine the resulting odor. After much persuasion, the attending staff decided to establish a laboratory, and I had one fitted up in the hospital. When the college opened in the autumn, however, the request came to return to the old method, as the student must have the specimen to examine at the bedside of the patient.

Bedside notes were unknown. In a few instances, I induced the nurses to keep records of serious cases. Presently the doctors began to ask to see them, and later, they were introduced. The surgeons criticized our counting sponges in cases of abdominal section, but later adopted the method after several lives had been lost from sponges being left in the wound.

Plaster casts and bandages were made from one and one-half to two inches in thickness, with strips of iron on either side to keep them from breaking, with the result that the patients were unable to carry them about on leaving their beds.

The nurses were sleeping in cubicles built into an old ward, and after a stormy night, their beds were often festooned with snow. No sitting room was provided. The dining room was presided over by an autocrat who required each nurse to take her food from a side table, wash her own dishes, and place them in the cupboard after the meal. There was small inducement for women of a refined type to enter the school, only four really suitable candidates offered, and the

trustees decided to defer the plan. Ten years passed before a school was made possible through necessary reforms.

Later, on my return from an inspection of English hospitals, I was asked to take charge of a school at one of the oldest, most conservative, and richly endowed hospitals in our country. The school had been organized by a committee of intelligent men and women interested in improved methods of caring for the sick, who had gained the consent of the trustees to introduce the Nightingale system of training nurses. The applicants to this school were interviewed and selected by the committee and handed over to the superintendent for training. The apprenticeship method was in full sway, although education of the nurses was supposed to be one of the first considerations. Probationers came in one by one, as the need presented itself, and were initiated at once into ward work. Mopping the floors of the wards was the first lesson; the second, cleaning the ice box. Never have I seen floors so clean nor ice boxes so immaculate. For two years I taught every probationer on entering, these duties. Fortunately there were graduate head nurses in charge of the wards, and a ward maid was provided for each two wards. When, after many struggles, the superintendent of the hospital was converted to higher ideals, he offered two maids, costing the hospital just $240 a year, with board.

There was a splendid service. Graduate specials were unknown, and the pupils had the experience of fine, exacting, bedside nursing. There was eleven-hour duty, with an afternoon and, sometimes, two hours on Sunday, for off time.

The operating room was presided over by a male nurse who had served in the Civil War. When I suggested introducing pupil nurses into the operating room, he told the surgeons it would be accomplished only over his dead body. Six years later this was done, and he survived!

The operating room in those days was interesting. Two red plush cushions, furnished with every kind of surgical needle, threaded with suture silk, were hung on the pillars on either side of the ampitheatre. From these, the surgeon made his selection. In conversation, one day, with a surgeon of world-wide reputation, he remarked with pride that he had operated in this double breasted broadcloth coat for twenty-five years! The first operating gown, introduced by a member of the house staff, was a sheet folded over a string and tied around the neck. Later, the attending surgeons became interested in this protection and sterilized operating coats and gowns were provided.

About this time the sea sponge was superseded by the gauze or

woolen sponge which was sterilized. Some of you may recall that in the preparation of the sea sponge, from fifteen to twenty waters had to be used, and every part of the sponge carefully examined by the fingers. Endless time was consumed in this way. Crocks filled with carbolic were marked for each day of the week, so that the sponges used on Saturday were not to be used again until the following Saturday.

In each men's ward, a tray for catheters, with a cup in the center to hold a glass of oil, was kept on the table. The oil was changed weekly and unsterilized catheters were used. Some patients, allowed to catheterize themselves, kept the catheter in the commode at the bedside. Reform was brought about by a member of the house staff who learned from the records of previous cases, that numbers of operations had been complicated by cystitis.

The instruction had to be covered largely by the superintendent of the school who undertook all class work. Twelve lessons in cooking were given at an outside school; twelve lectures, and the examinations were given by the attending staff; the house staff gave a few lectures on request and many a member of our older group will recall with gratitude the invaluable bedside instruction given by these men.

With the advance of medicine, through bacteriology and research, our responsibilities became greater, strict accuracy was required and the nursing staff was increased. As the hospital expanded, the nurses' residence grew smaller, and it was difficult to convince the trustees of that richly endowed hospital that more and better living facilities must be guaranteed for the school. A crisis was reached when it was discovered that ten night nurses were sleeping in day nurses' beds. On presenting the facts, I learned that no additions would be made to our dormitory during the ensuing year. I insisted upon the trustees making a personal inspection, with the result that two stories were added to the residence at once.

At another hospital where a school had recently been established, I found the pupils collecting and bringing to the wards all supplies of drugs and laundry. Never shall I forget seeing a frail nurse tumble over the stairs and roll down, with one of the huge bags of soiled linen rolling after. In this hospital, marbles were coated with sediment beyond recognition; ward chimnies were filled with dust; tuberculous patients were allowed to expectorate into sawdust tubs that were seldom emptied. Handerchiefs used by tuberculous patients were kept dry a whole week to be washed on a special day. Stuffed chairs, of ancient and venerable design and covering, decorated the wards. Nurses had to measure endless doses of medicine by the light of a flickering gas burner high above their heads, in rooms with no

windows. Small wonder that some lost their health as well as their courage! Many brave souls, however, withstood these vicissitudes and reaped a rich reward in seeing the eyes of the blind opened to the importance of a thorough nursing education and of every human being's right to health.

In conclusion, let us urge upon our splendid corps of young nurses, the necessity of differentiation between the important and the unimportant, making light of the things that cannot be remedied, and counting it a good sporting chance to build up a splendid and lasting work upon a slender or discouraging foundation. To keep a true sense of proportion amid conflicting interests; to see the ebb and flow of events demolish our cherished hopes, or to wait years for results and then begin over again,—these require undaunted courage. A high privilege of service has been opened to the nursing profession. Let us prove worthy of the trust.

A special committee of the National Association for the Study and Prevention of Tuberculosis announces the exact proportions of the double red cross, the international tuberculosis emblem, which have been adopted for use in the United States. Every organization or institution dealing with tuberculosis will be urged to use the emblem in its correct proportions. The width of the cross is taken as the unit in determining the proportions. The length of the lower leg is 7 units; the arms are 3 units on either side; the point above the arms 2½ units; and the distance between the arms 1½ units. These measurements hold good for any size.

The double red cross was first adopted as the symbol of the International Anti-Tuberculosis Association in Berlin in October, 1902. To-day the emblem is being used by anti-tuberculosis workers in every part of the world, even in Iceland, India, South Africa, Labador, Japan, China and the Philippines. In the United States over 1200 anti-tuberculosis associations and committees, nearly 550 sanatoria and hospitals; 400 dispensaries, and about 200 open-air schools, besides a number of other organizations, are using the double red cross as their emblem. Wherever it is seen, it means war against tuberculosis.